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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,233	05/21/2001	Joseph Depaolantonio	CSCO-103808	9945

7590

01/30/2004

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EXAMINER

CHAN, ALEX H

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 01/30/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,233

Applicant(s)

DEPAOLANTONIO, JOSEPH

Examiner

Alex H Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 14-19** recite the limitation "A system as described," "said system" or "said computer systems". There are insufficient antecedent basis for these limitations in these claims which are depending on their parent claims 1 and 2.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 3-7, 9, 12, 14-15 and 20-24** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,344,910 B1 to Cao.

Regarding claim 1, 3, 5, 7, 9, 12, 15, and 21-23, Cao discloses a method for auditing an optical network (Fig. 2) comprising the steps of transmitting a query (via 30) to a hardware device (400 or 420 of Fig. 4) in said optical network; receiving a response to said query (via 400 or 40 or via 416 of Fig. 4); analyzing said response to said query (e.g. 400 (automated intelligent

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decision-making), Col. 11, lines 2-33) and producing a report (e.g. charts, graphs, histograms (i.e. recommendation), Col. 13, lines 14-33) of said response and said analysis.

Regarding claims 4, 14 and 24, Cao discloses at least a portion of said network is implemented as a DWDM optical network (Col. 4, lines 7-12).

Regarding claim 6, Cao disclose wherein the hardware device is a DWDM device (Col. 4, lines 7-12).

Regarding claim 20, Cao discloses all limitations as discussed above, and further discloses a computing element (e.g. 400 of Fig. 2 or 420 of Fig. 4) wherein device for auditing an optical network is capable of formulating and transmitting queries.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. **Claims 1, 13 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,678,475 B1 to Turban et al (hereinafter Turban) in view of U.S. Patent No. 6,072,609 to Masuda or U.S. Patent No. 5,367,394 to Chuter et al (hereinafter Chuter) or Cao.

Regarding claim 1, Turban discloses a method for auditing an optical network (Fig. 2) comprising the steps of: a) transmitting a query (via 11) to a hardware device (e.g. 7, 8, 9 or 10) in said optical network; b) receiving a response to said query (e.g. being aware of individual delays, Col. 5, lines 51-53); c) analyzing said response to said query (e.g. by computing and specifying optimum wavelength changes, Col. 5, lines 27-28 and lines 54-55). However, Turban does not disclose producing a report of said response and said analysis. Masuda discloses producing a report of said response and said analysis (via 36 and 37 of Fig. 11, Col. 14, lines 1-9). Likewise, Chuter discloses producing a report of said response and said analysis (via "T" of Fig. 3 and Col. 4, lines 22-31 and Col. 6, lines 30-32). Further, Cao discloses producing a report of said response and said analysis (via 400 of Fig. 2 and Col. 12, lines 14-33). Accordingly, one of the ordinary skilled in the art would have been motivated to produce a report of said response and said analysis for the purpose of controlling the performance and monitoring optical signal in an optical network (Col. 1, line 65-Col. 2, line 25, Cao). Therefore, it would have been obvious to one artisan from the same endeavor at the time the invention was made to modify the optical network of Turban by producing a report of response and analysis because this helps to control and monitor the performance of an optical network as suggested by Cao.

Also, producing a report of said response and said analysis is notoriously well known and conventional in the art. One of the ordinary skilled in the art could have been motivated to produce report of response and analysis, for example, via a printer for reviewing purpose by a

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network administrator. Therefore, it would have been obvious to one artisan from the same endeavor to incorporate producing a report of response and analysis because it is a widely-used technology that enables network administrator to review network progress and faults if any.

Regarding claim 13, Turban discloses all limitations as discussed above, and further discloses two or more computer systems (e.g. computer systems inside any two network elements, 1 and 3 of Fig. 1 or 7-10 of Fig. 2); an optical network coupled to said computer systems, said network communicatively coupled with said computer systems, said optical network comprising an optical medium (Col. 5, line 66-Col. 6, line 11) and optical devices (e.g. 4 and 5 of Fig. 1) for providing a communication link between said computer systems; and, a device (11 of Fig. 2) coupled to said optical network and capable of transmitting queries (Col. 5, lines 45-55) in said optical network to said optical devices.

Regarding claim 20, Turban discloses all limitations as discussed above, and further discloses a transmitting element (5 of Fig. 1) coupled to said optical network (via 2 of Fig. 1); A receiving element (4 of Fig. 1) coupled to said optical network; and, a computing element (6 of Fig. 1), coupled to said optical network, wherein said device for auditing an optical network (via 11 of Fig. 2) is capable of formulating (e.g. via processing device for computing assignments from stored values, Col. 5, lines 24-26 or via Col. 4, lines 19-37 and lines 57-67) and

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transmitting queries to devices in said optical network and receiving responses to said queries (Fig. 2).

7. **Claims 1-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0069275 A1 to Tindal in view of U.S. Patent No. 6,072,609 to Masuda or U.S. Patent No. 5,367,394 to Chuter et al (hereinafter Chuter) or Cao.

Regarding claims 1, 5, 7-9, 15 (as far as understood), 18 (as far as understood) and 21, Tindal discloses a method for auditing an optical network (Fig. 2) comprising the steps of: a) transmitting a query (via 110 and 140 or via selecting a network device that needs to be configured, 250 of Fig. 7 and [0054]) to a hardware device (e.g. 115, 125, 130, 100, 145) in said optical network; b) receiving a response (e.g. from 135) to said query ([0031] and [0032] or via configuration record associated with the selected device being retrieved, 255 of Fig. 7, [0054]); c) analyzing said response to said query (e.g. via 140, or checking network policies (i.e. automatically) and 260 of Fig. 7 or via Fig. 3). However, Tindal does not disclose producing a report of said response and said analysis. Masuda discloses producing a report of said response and said analysis (via 36 and 37 of Fig. 11, Col. 14, lines 1-9). Likewise, Chuter discloses producing a report of said response and said analysis (via "T" of Fig. 3 and Col. 4, lines 22-31 and Col. 6, lines 30-32). Further, Cao discloses producing a report of said response and said analysis (via 400 of Fig. 2 and Col. 12, lines 14-33). Accordingly, one of the ordinary skilled in the art would have been motivated to produce a report of said response and said analysis for the purpose of controlling the performance and monitoring optical signal in an optical network (Col.

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1, line 65-Col. 2, line 25, Cao). Therefore, it would have been obvious to one artisan from the same endeavor at the time the invention was made to modify the optical network of Tindal by producing a report of response and analysis because this helps to control and monitor the performance of an optical network as suggested by Cao.

Also, Tindal discloses a network administrator that is capable of producing a report of response and analysis as known in the art and that producing a report of said response and said analysis is notoriously well known and conventional in the art. One of the ordinary skilled in the art could have been motivated to produce report of response and analysis, for example, via a printer for reviewing purpose by a network administrator. Therefore, it would have been obvious to one artisan from the same endeavor to incorporate producing a report of response and analysis because it is a widely-used technology that enables network administrator to review network progress and faults if any.

Regarding claim 13, Tindal discloses all limitations as discussed above, and further discloses two or more computer systems (e.g. computer systems inside routers 100 and 105 of Fig. 1); an optical network coupled to said computer systems, said network communicatively coupled with said computer systems, said optical network comprising an optical medium (via arrows (not labeled, Fig. 2 or Fig. 8)) and optical devices (e.g. 125 and 130 of Fig. 2) for providing a communication link between said computer systems (via 135 of Fig. 2); and, a device (110 and 140 of Fig. 2) coupled to said optical network and capable of transmitting queries ([0040]) in said optical network to said optical devices.

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Regarding claim 20, Tindal discloses all limitations as discussed above, and further discloses a transmitting element (e.g. transmitting element inside 140 for transmitting queries to 135, 150 or 155) coupled to said optical network; a receiving element (e.g. receiving element inside 140 for receiving queries from 135, 150 or 155) coupled to said optical network; and, a computing element (110), coupled to said optical network, wherein said device for auditing an optical network is capable of formulating (e.g. via receiving network device identifier, retrieving a configuration template, populating attribute filed with attribute data, formatting the attributing and providing formatted attribute data to network device, [0058] and [0059]) and transmitting queries to devices in said optical network and receiving responses to said queries (Fig. 2).

Regarding claim 2, Tindal discloses transmitting a second query (via Fig. 7 or device-specific commands) to said hardware device, said second query based on said response to said first query, in order to gather status information of said hardware device (e.g. operational status, [0041]).

Regarding claim 3, Tindal discloses report includes recommendations (e.g. configuration records of the network, [0054]) associated with the management of said network. Also, recommendation on the management of the network is notoriously conventional and widely utilized by industries in the art for the motivation a discussed above. It would also be a matter of design choice to produce a report with recommendations on the management of the

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network. This support rational is based on a recognition that the claimed differences exist not as a result of an attempt by applicant to solve a problem but merely amounts to selection of expedient known to the artisan of ordinary as design choice.

Regarding claims 4, 6, 14 (as far as understood) and 24, Tindal discloses at least a portion of said network is implemented as a DWDM optical network (Fig. 8, Tindal or Col. 4, lines 7-12, Cao).

Regarding claims 10 and 11, Tindal discloses first query code requests information related to the part number and location in said optical network of said hardware device [0041] and second query code is determined by database reference (e.g. via 145 of Fig. 2 or 165 of Fig. 3) to the hardware type of said hardware device.

Regarding claim 12, Tindal discloses analyzing said responses to said queries is performed by automated intelligent decision-making (e.g. via 140, or checking network policies and 260 of Fig. 7 or via Fig. 3).

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Regarding claims 16-17 (as far as understood), Tindal discloses a data storage device (e.g. data storage inside 110 of Fig. 2, or 145 of Fig. 2, or 165 of Fig. 3 or 115 of Fig. 1), capable of storing instructions (e.g. device-specific commands) for transmitting or receiving said queries in said optical network.

Regarding claims 19 (as far as understood) and 22, Tindal discloses a device capable of presenting said responses and said analysis in a user readable format (e.g. via 110 of Fig. 2).

Regarding claim 23, Tindal discloses a device capable of making recommendations (Fig. 7) for appropriate action in the management of said optical network.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suzuki is cited to show transmitting and receiving unit coupled with graph displaying unit and a CPU for making recommendation (Fig. 5). Hung is cited to show a SCU having a network processing unit for managing an optical network (Fig. 1, 6 and 10). Kosugi et al is cited to show a display controller, a CPU, I/O controller, transmitter, receiver, data storage device and wavelength multiplexer/demultiplexer (Fig. 3). Stevens et al is cited to show a combiner, splitters, DWDM devices and processors (Fig. 1). Takai et al is cited to demonstrate DWDM

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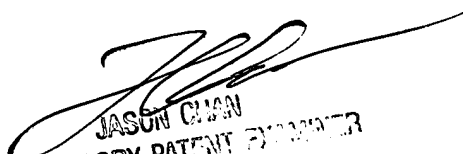
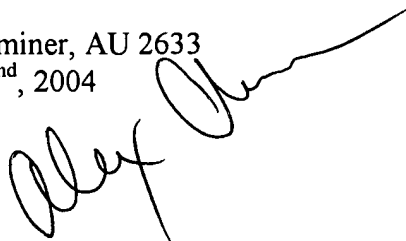
devices (Fig. 1) in an optical network having a method for transmitting and receiving queries, fault management unit (Fig. 5) for managing network and displaying unit for displaying information regarding the network (Fig. 8B, 36 and 44). Lewis is cited to show a typical communication network connecting printing, user workstations and the internet (Fig. 1 and 2). Lahat et al is cited to show a transmitting and receiving unit coupled with work stations (Fig. 5 and 6). Fee is cited to show a network management system managing plurality of devices comprising workstations and computers (Fig. 1, 2 and 5).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex H Chan whose telephone number is (703) 305-0340. The examiner can normally be reached on Monday to Friday (8am to 6pm EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Alex Chan
Patent Examiner, AU 2633
January 22nd, 2004



JASON CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER